

## FACILITY PERMIT TO OPERATE THE PQ CORP

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
<b>Process 2 : FURNACE</b>					
<b>System 2 : SODIUM SILICATE MELTING FURNACE</b>					
FURNACE, MELTING, (TOTAL OF 12 BURNERS), NATURAL GAS, WITH TWO REGENRATORS AND 20 OVERFIRE AIR PORTS, 56.6 MMBTU/HR A/N:	D18		NOX: MAJOR SOURCE**	CO: 2000 PPMV NATURAL GAS (5) [RULE 407,4-2-1982] ; PM: (9) [RULE 404,2-7-1986;RULE 405,2-7-1986] ; PM: 0.1 GRAINS/SCF (5A) [RULE 409,8-7-1981]  PM: (8) [40CFR 60 Subpart CC,10-17-2000]	A63.2, B59.1, B59.2, C1.4, D29.1, D323.1, E193.1

\* (1)(1A)(1B) Denotes RECLAIM emission factor (2)(2A)(2B) Denotes RECLAIM emission rate  
(3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit  
(5)(5A)(5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit  
(7) Denotes NSR applicability limit (8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS, etc.)  
(9) See App B for Emission Limits (10) See Section J for NESHAP/MACT requirements

\*\* Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

## **FACILITY PERMIT TO OPERATE THE PQ CORP**

### **SECTION H: DEVICE ID INDEX**

**The following sub-section provides an index  
to the devices that make up the facility  
description sorted by device ID.**

# **FACILITY PERMIT TO OPERATE THE PQ CORP**

## **SECTION H: DEVICE ID INDEX**

Device Index For Section H			
Device ID	Section H Page No.	Process	System
D18	1	2	2

## FACILITY PERMIT TO OPERATE THE PQ CORP

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

#### DEVICE CONDITIONS

##### A. Emission Limits

A63.2 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
ROG	Less than or equal to 7846 LBS IN ANY ONE DAY
SOX	Less than or equal to 176 LBS IN ANY ONE DAY
CO	Less than or equal to 8406 LBS IN ANY ONE DAY
PM	Less than or equal to 223 LBS IN ANY ONE DAY

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D18]

##### B. Material/Fuel Type Limits

B59.1 The operator shall not use the following material(s) in this device :

dense type soda ash with less than 58 percent by weight sodium oxide

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D18]

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### **SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE**

The operator shall comply with the terms and conditions set forth below:

B59.2 The operator shall not use the following material(s) in this device :

material with less than 2.5 percent by weight of free water.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]**

[Devices subject to this condition : D18]

### **C. Throughput or Operating Parameter Limits**

C1.4 The operator shall limit the material processed to no more than 263 ton(s) in any one day.

For the purpose of this condition, material processed shall be defined as the furnace pull rate.

**[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]**

[Devices subject to this condition : D18]

### **D. Monitoring/Testing Requirements**

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The operator shall comply with the terms and conditions set forth below:

D29.1 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NOX emissions	District method 100.1	15 minutes	Outlet
CO emissions	District method 100.1	15 minutes	Outlet
PM emissions	Approved District method	District-approved averaging time	Outlet

The test(s) shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up.

The test shall be conducted to demonstrate NOx emission reduction by the installation of overfire air ports.

The test shall be conducted to demonstrate that there are no CO and PM emission increases by the installation of overfire air ports.

In addition to the source test requirements of Section E of this facility permit, the facility permit holder shall submit the protocol to the AQMD engineer no later than 45 days prior to the proposed test date, and notify the District of the date and time of the test at least 10 days prior to the test.

During the source test(s), the facility permit holder shall also measure the oxygen and CO2 levels in the exhaust, flue flow rate (CFH), the flue gas rate, flue gas temperature, and the sodium silicate production rate.

**[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 407, 4-2-1982; RULE 409, 8-7-1981]**

[Devices subject to this condition : D18]

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### **SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE**

The operator shall comply with the terms and conditions set forth below:

- D323.1 The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and on a semi-annual basis, at least, unless the equipment did not operate during the entire semi-annual period. The routine semi-annual inspection shall be conducted while the equipment is in operation and during daylight hours.

If any visible emissions (not including condensed water vapor) are detected that last more than three minutes in any one hour, the operator shall verify and certify within 24 hours that the equipment causing the emission and any associated air pollution control equipment are operating normally according to their design and standard procedures and under the same conditions under which compliance was achieved in the past, and either:

- 1). Take corrective action(s) that eliminates the visible emissions within 24 hours and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit; or
- 2). Have a CARB-certified smoke reader determine compliance with the opacity standard, using EPA Method 9 or the procedures in the CARB manual "Visible Emission Evaluation", within three business days and report any deviations to AQMD.

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

- 1). Stack or emission point identification;
- 2). Description of any corrective actions taken to abate visible emissions;
- 3). Date and time visible emission was abated; and
- 4). All visible emission observation records by operator or a certified smoke reader.

**[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]**

[Devices subject to this condition : D18]

### **E. Equipment Operation/Construction Requirements**

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The operator shall comply with the terms and conditions set forth below:

E193.1 The operator shall construct, operate, and maintain this equipment according to the following requirements:

The operator shall notify the Administrator at least 60 days prior to changing the furnace from a furnace with modified processes to one without modified processes, or visa versa.

**[40CFR 60 Subpart CC, 10-17-2000]**

[Devices subject to this condition : D18]